

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. (currently amended): A secure method of exchanging information messages sent successively from a sending platform to a receiving platform, the method comprising:

a) an initialization sequence in which an initialization message containing information relating to a date  $t_1$  for sending a first information message  $M_1$  is exchanged between said sending platform and said receiving platform so that said sending platform and said receiving platform know said date  $t_1$  for sending said first information message  $M_1$ , and

b) an information message transmission sequence in which:

- said information messages are sent successively by said sending platform at given time intervals  $\Delta T_E$  with a sending time tolerance  $\delta$  based on a clock specific to said sending platform, so that said first message  $M_1$  is sent at said date  $t_1$  on said clock and the  $n$ th message  $M_n$  is sent at the date  $t_n = t_1 + (n-1) \cdot \Delta T_E + \delta$ , each message  $M_n$  being coded by means of a dynamic code  $C_n$  specific to said date  $t_n$  of sending said message, and

- said messages received by said receiving platform are processed as a function of their reception date  $t_r$  based on a clock specific to said receiving platform so that said messages received successively in an a same observation time window  $F_n$  containing  $t_n$  with a width of  $T_F$  are decoded using a decoding sequence  $DC_n$  adapted to decode said dynamic code  $C_n$ , said clock of said receiving platform being synchronized to said date  $t_1$  on receiving said first message  $M_1$ .

2. (original): The secure method claimed in claim 1 of exchanging information messages, wherein during said initialization sequence a) a coded initialization message  $M_0$  is sent from said sending platform to said receiving platform and a coded initialization message  $M'_0$  is sent from said receiving platform to said sending platform, said initialization messages  $M_0$ ,  $M'_0$  containing the information relating to said date  $t_1$  for sending said first information message  $M_1$ , and said initialization messages  $M_0$ ,  $M'_0$  being decoded by said sending platform and said receiving platform which then know said date  $t_1$  for sending said first information message  $M_1$ .

3. (original): The secure method claimed in claim 1 of exchanging information messages, wherein, if said first message  $M_1$  is not received within an allotted time after reception of said initialization message, said clock of said sending platform is automatically synchronized to said date  $t_1$  at the moment corresponding to the end of the allotted time.

4. (previously presented): The secure method claimed in claim 1 of exchanging information messages, wherein said observation window  $F_n$  corresponds to a time window  $[t_1 + (n-1) \cdot \Delta T_E - \Delta T_F \cdot \varepsilon, t_1 + (n-1) \cdot \Delta T_E + \Delta T_F \cdot (1-\varepsilon)]$ , where the width of the observation window  $\Delta T_F$  satisfies the equation  $\Delta T_F \leq \Delta T_E$  and  $\varepsilon$  is from 0 to 1.

5. (original): The secure method claimed in claim 1 of exchanging information messages, wherein a clock synchronization signal is sent regularly by said sending platform between sending messages  $M_n$ , said synchronization signal being used to correct the frequency or the phase of the internal clock of said receiving platform dynamically in order to reduce the

phase or frequency error between the internal clocks of said receiving platform and said sending platform.

6. (original): The secure method claimed in claim 1 of exchanging information messages, wherein said information messages decoded by said receiving platform are transmitted to an information processing module.

7. (original): The secure method claimed in claim 1 of exchanging information messages, said messages received by said receiving platform during an observation window  $F_n$  are stored sequentially in a memory able to store only one message at a time and only the message stored in said memory at the end of said observation window  $F_n$  is transmitted to said information processing module.

8. (original): The secure method claimed in claim 1 of exchanging information messages, wherein said sending platform is part of a centralized control station of a rail traffic supervision and control system, said receiving platform is part of a fixed installation disposed alongside a rail track, and said information processing module is a control unit on board a train circulating on a track section associated with said fixed installation.

9. (cancelled).